

IN THE CLAIMS:

Applicant, pursuant to revised 37 C.F.R. § 1.121, submits the following amendments to the claims:

1-5. (Cancelled)

6. (Currently amended) A computer implemented method for providing a diagnosis to a user ~~ranked set of alternatives according to likelihood~~, comprising:

(a) configuring, in one or a plurality of electronic databases stored in a storage device of a computer, a set of ~~alternatives~~ alternative diagnoses, a query set comprising at least one query, and a set of primary bias values, wherein the set of primary bias values comprises, with respect to each query, a corresponding set of alternative diagnosis-specific primary bias values each directly associating the particular query with each respective alternative diagnosis ~~wherein each primary bias value directly associates a particular query with a particular alternative of the set of alternatives, and each bias value directly reflecting~~ reflects at least one human expert's prior conception of the degree of predictive value of the query for the particular alternative diagnosis relative to others;

(b) inputting a ~~user's~~ response to the at least one query into the computer; and

(c) ranking, using a software program stored on the storage device that is operative with a processor of the computer to receive and process the ~~user's~~ response, and the alternatives alternative diagnoses according to relative likelihood, based at least in part on the set of primary bias values to provide a diagnosis comprising a ranked set of alternatives alternative diagnoses; and

(d) providing the diagnosis, or a portion thereof, to a user.

7. (Currently amended) The method of claim 6, wherein ranking the set of ~~alternatives~~ alternative diagnoses further comprises querying the one or more electronic databases to generate at least one secondary bias value that is based on the corresponding primary bias value and the response to the query, wherein each secondary bias value is associated with a particular alternative of the set of alternatives, and reflects the expert prior conception of the degree of predictive value of the query and response for the particular ~~alternative~~ alternative diagnosis relative to others, and

wherein ranking is based, at least in part, on the secondary bias values, or at least in part on a combination of the primary and secondary bias values.

8. (Previously presented) The method of claim 7, wherein generating the secondary bias values involves increasing, decreasing or conserving the corresponding primary bias values based on the response to the query.

9. (Currently amended) The method of claim 7, wherein the query set comprises a plurality of queries, and wherein ranking the ~~alternatives~~ alternative diagnoses involves summing and averaging of at least one of primary and secondary bias values.

10. (Currently amended) The method of claim 7, wherein generating secondary bias values, and ranking the ~~alternatives~~ alternative diagnoses is achieved, at least in part, by using algorithm 42.

11. (Currently Amended) The method of claim 6, wherein the set of ~~alternatives~~ alternative diagnoses is a set of alternate medical diagnoses or conditions, a set of alternative machine problems or conditions, or a set of software problems or conditions, wherein the expert is a medical expert, a machine expert or a software expert, respectively, and wherein ranking the alternative diagnoses ~~alternatives~~ provides a list of alternate medical diagnoses or conditions, alternative machine problems or conditions or alternative software problems or conditions, respectively, ranked according to likelihood.

12. (Previously presented) A computer apparatus for ranking a set of alternatives according to likelihood, comprising:

- (a) a computer having a processor and at least one storage device connected thereto;
- (b) a database of alternatives, comprising a stored set of alternatives;
- (c) a database of queries, comprising a stored set of at least one query;
- (d) a primary bias value database, comprising a stored set of primary bias values, wherein each primary bias value directly associates a particular query with a particular alternative of the set of alternatives, and reflects at least one human expert's prior conception of the degree of predictive value of the query for the particular alternative relative to others; and

(e) a stored software program operative with the processor to receive and process a user's response to the query, and to rank the alternatives according to relative likelihood based, at least in part, on the set of primary bias values.

13. (Previously presented) The apparatus of claim 12, further comprising a user database, comprising user information, wherein the program is operative with the processor to store, access and update user information when new user information is received.

14. (Previously presented) The apparatus of claim 13, wherein the program is further operative with the processor to track the user information.

15. (Currently amended) A computer implemented method, over a wide-area network, for providing a ranked set of alternative diagnoses ~~alternatives~~ according to likelihood, comprising:

(a) configuring, in one or a plurality of electronic databases of a server, a set of ~~alternatives~~ alternative diagnoses, a query set comprising at least one query, and a set of primary bias values, wherein the set of primary bias values comprises, with respect to each query, a corresponding set of alternative diagnosis-specific primary bias values each directly associating the particular query with each respective alternative diagnosis ~~wherein each primary bias value directly associates a particular query with a particular alternative of the set of alternatives~~, and each bias value directly reflecting ~~reflects~~ at least one human expert's prior conception of the degree of predictive value of the query for the particular alternative diagnosis relative to others;

(b) inputting a user's response to the at least one query into a computer through a user subsystem;

(c) transmitting the user's response to the server over the wide-area network;

(d) ranking, using a software program stored on the storage device that is operative with a processor of the computer to receive and process the user's response, and the alternatives ~~alternatives~~ alternative diagnoses according to relative likelihood, based at least in part on the set of primary bias values to provide a diagnosis comprising a ranked set of alternatives ~~alternatives~~ alternative diagnoses; and

(e) transmitting the ranked set of alternative diagnoses ~~alternatives~~ to the user subsystem over the wide-area network, whereby the set of alternative diagnoses ~~alternatives~~ is ranked according to likelihood to provide a ranked set of alternative diagnoses ~~alternatives~~.

16. (Currently amended) The method of claim 15, wherein ranking the alternative diagnoses ~~alternatives~~ further comprises querying the one or more electronic databases of the server to generate at least one secondary bias value that is based on the corresponding primary bias value and the response to the query, wherein each secondary bias value is associated with a particular alternative diagnoses ~~alternatives~~ of the set of alternative diagnoses ~~alternatives~~, and reflects the expert prior conception of the degree of predictive value of the query for the particular alternative diagnoses ~~alternatives~~ relative to others, and wherein ranking is based, at least in part, on the secondary bias values, or at least in part on a combination of the primary and secondary bias values.

17. (Previously presented) The method of claim 16, wherein generating the secondary bias values involves increasing, decreasing or conserving the corresponding primary bias values based on the response to the query.

18. (Currently amended) The method of claim 16, wherein the query set comprises a plurality of queries, and wherein ranking the alternative diagnoses ~~alternatives~~ involves summing and averaging of at least one of primary and secondary bias values.

19. (Currently amended) The method of claim 16, wherein generating secondary bias values, and ranking the alternative diagnoses ~~alternatives~~ is achieved, at least in part, by using algorithm 42.

20. (Currently amended) The method of claim 15, wherein the set of ~~alternatives~~ alternative diagnoses is a set of alternate medical diagnoses or conditions, a set of alternative machine problems or conditions, or a set of software problems or conditions, wherein the expert is a medical expert, a machine expert or a software expert, respectively, and wherein ranking the alternative diagnoses ~~alternatives~~ provides a list of alternate medical diagnoses or conditions, alternative machine problems or conditions or alternative software problems or conditions, respectively, ranked according to likelihood.

21. (Currently amended) A computer network apparatus for ranking a set of alternatives according to likelihood, comprising:

- (a) a server having a processor and at least one storage device connected to the processor;
- (b) a database of alternatives, comprising a stored set of alternative diagnoses ~~alternatives~~;
- (c) a database of queries, comprising a stored set of at least one query;
- (d) a primary bias value database, comprising a stored set of primary bias values, wherein the set of primary bias values comprises, with respect to each query, a corresponding set of alternative diagnosis-specific primary bias values each directly associating the particular query with each respective alternative diagnosis ~~wherein each primary bias value directly associates a particular query with a particular alternative of the set of alternatives~~, and each bias value directly reflecting ~~reflects~~ at least one human expert's prior conception of the degree of predictive value of the query for the particular alternative diagnosis relative to others; and
- (e) a stored software program operative with the processor to receive and process, from a user subsystem, a user's response to the query, and to rank the alternative diagnoses ~~alternatives~~ according to relative likelihood based, at least in part, on the set of primary bias values, for transmission to the user subsystem.

22. (Previously presented) The apparatus of claim 21, further comprising a user database, comprising user information, wherein the program is operative with the processor to store, access and update user information when new user information is received.

23. (Previously presented) The apparatus of claim 21, wherein the program is further operative with the processor to track the user information.

24. (Currently amended) The apparatus of claim 12, wherein ranking the set of alternative diagnoses ~~alternatives~~ further-comprises querying at least one database to generate at least one secondary bias value that is based on the corresponding primary bias value and the response to the query, wherein each secondary bias value is associated with a particular alternative diagnosis ~~alternative~~ of the set of alternative diagnoses ~~alternatives~~, and reflects the expert prior conception of the degree of predictive value of the query and response for the particular alternative

diagnosis alternative relative to others, and wherein ranking is based, at least in part, on the secondary bias values, or at least in part on a combination of the primary and secondary bias values.

25. (Currently amended) The apparatus of claim 21, wherein ranking the set of alternative diagnoses alternatives further-comprises querying at least one database to generate at least one secondary bias value that is based on the corresponding primary bias value and the response to the query, wherein each secondary bias value is associated with a particular alternative diagnosis alternative of the set of alternative diagnoses alternatives, and reflects the expert prior conception of the degree of predictive value of the query and response for the particular alternative diagnosis alternative relative to others, and wherein ranking is based, at least in part, on the secondary bias values, or at least in part on a combination of the primary and secondary bias values.

26. (New) The method of claim 11, wherein the set of alternatives diagnoses is a set of alternate medical diagnoses or conditions, wherein the expert is a medical expert, and wherein ranking the alternative diagnoses provides a list of alternate medical diagnoses or conditions, ranked according to likelihood.